"Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Second and Final Bill

Quality Control Reports

BOOK NO - 02

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

QC ABSTRACT

.ME OF WORK: Improvements to roads drains and other developmental works in Ananthapura Attur ard No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

SO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Coarse aggregate(20 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
		Aggregate crushing Value	One Test		1	1
		Aggregate Impact Value	One Test		1	1
4	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
5	Steel	Bend test	One Test		1	1
		Tensile Test	One Test		1	1
		Yield Test	One Test		1	1
		ReBend test	One Test		1	1
6	AE-2 Block(400*200*200)	BLOCK DENSITY	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		DIMENSION ANALYSIS	One Test		1	1
		COMPRESSIVE STRENGTH	One Test		1	1
7	A.E.E Block(400*100*200)	BLOCK DENSITY	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		DIMENSION ANALYSIS	One Test		1	1
		COMPRESSIVE STRENGTH	One Test		1	1
8	PCC(M15)	Compressive Strength(7days and 28days)	4 set /31-50 cum	41.49	8	8
9	RCC(M20)	Compressive Strength(7days and 28days)	7 set /150-200 cum	161.77	14	14

AE-02

10	RCC(M25)	Compressive Strength(7days and 28days)	5 set /51-100 cum	81.7	10	10
11	RCC(M25)	Compressive Strength(7days and 28days)	5 set /51-100 cum	68.46	10	10
12	RCC(M20)	Compressive Strength(7days and 28days)	1 set		2	2
13	RCC(M20)	Compressive Strength(7days and 28days)	1 set		2	2
14	RCC(M20)	Compressive Strength(7days and 28days)	1 set /1-5 cum	2.15	2	2
15	RCC(M20)	Compressive Strength(7days and 28days)	1 set /1-5 cum	2.18	2	2
16	Mortar Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		Compacted Bulk Density	One Test		1	1
		Loose Bulk Density	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1
17	Plaster Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1

AE.2

A.E.E

AE-02

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : **CP-2021-10-22-24** **Date: 24-07-21**

Project Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

Agency : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83

Customer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 25-06-21

Sample Type : Birla Super 53grade

Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5
IS 4031 Part 6, Determination of Compressive Strength, Clause 6

Date of test : 26-06-21

Environmental Conditions during test : Temperature: 26°C
Humidity: 72%

Compressive Strength

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	28.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.0N/mm^2	Not less than 37 N/mm^2
3	28 Days	58.5N/mm^2	Not less than 53 N/mm^2

The results obtained are satisfactory as per standard requirements.

A.E.E AE-02

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2021-10-22-24** **Date: 29-06-21**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	12.4	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	11.8	
3	Specific Gravity	2.68	–
4	Bulk Density(Loose) (Kg/l)	1.53	–
5	Bulk Density(Compacted) (Kg/l)	1.57	–
	Water Absorption(%)	0.23	–

* The results obtained are satisfactory as per standard requirements.

A.E.L AE-2

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2021-10-22-24** **Date: 28-06-21**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	9.3	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	10.7	
3	Specific Gravity	2.67	–
4	Bulk Density(Loose) (Kg/l)	1.54	–
5	Bulk Density(Compacted) (Kg/l)	1.58	–
6	Water Absorption(%)	0.22	–
7	Aggregate crushing Value(%)	24.5	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	23.5	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.
Sig
Date
BANGALORE
R KARTHIK RECHAN
Authorized Signature
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST RESULTS OF STEEL

Lab ID : **CP-2021-10-22-24** **Date: 26-06-21**

Project Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

Agency : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J P. Nagara,8th phase ,Bangalore-83

Customer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 25-06-21

Sample Type : Sunvik

Reference to BIS codes : IS 1786-2008, IS 1608-2005(RA 2011), IS 1599-2012.

Date of test: AB-2 : 25-06-21

SLNo	Identification of sample	Grade of the sample	Diameter of the steel bar	Weight of the sample	Yield stress	Tensile strength	Elongation	Bend test	Rebend test
			(mm)	(kg/m)	(N/mm2)	(N/mm2)	(%)		
1	Sunvik	Fe500	8	0.391	512	652	20.0%	Satisfactory	Satisfactory
2	Sunvik	Fe500	10	0.616	528	672	20.0%	Satisfactory	Satisfactory
3	Sunvik	Fe500	12	0.888	544	668	20.0%	Satisfactory	Satisfactory
4	Sunvik	Fe500	16	1.581	572	674	19.0%	Satisfactory	Satisfactory
5	Sunvik	Fe500	20	2.476	584	693	19.0%	Satisfactory	Satisfactory
6	Sunvik	Fe500	25	3.472	597	712	18.0%	Satisfactory	Satisfactory
7	Sunvik	Fe500	32	6.31	610	731	18.0%	Satisfactory	Satisfactory

* The results obtained are satisfactory as per standard requirements.

AB-02

CIVIL PRO Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

Lab ID : CP-2021-10-22-24 Date: 02-08-21

DIMENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	402	203	199	Length : ± 5mm Breadth : ± 3mm Height : ± 3mm
2	403	202	203	
3	403	200	202	
4	399	201	202	
5	400	203	199	
6	403	202	200	
7	402	201	200	
8	403	202	199	
9	400	202	200	
10	402	202	203	
11	403	199	200	
12	402	200	199	
13	400	200	199	
14	403	202	203	
15	401	203	201	
16	403	200	202	
17	402	199	201	
18	401	200	200	
19	400	202	200	
20	404	199	199	
Average of 20	402	201	201	

CIVIL Pro Sig Date BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

ID : CP-2021-10-22-24 **Date: 31/07/2021**

ject Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

ncy : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83

stomer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

e of Receipt : 05-07-21

stomer ID : PCC for SSM Footing

nple Type /Size : 150X150X150 mm

nple grade/Age : M15 / 28 Days Compressive Strength

ference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

te of test : 31/07/2021

L. o.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	PCC	M15	03/07/2021	31/07/2021	149.50 X 151.14 X 151.63	22596	8.621	391.0	17.3	17.2
2	PCC	M15	03/07/2021	31/07/2021	150.98 X 151.99 X 150.92	22948	8.069	392.1	17.1	
3	PCC	M15	03/07/2021	31/07/2021	149.06 X 150.96 X 150.35	22501	8.161	389.9	17.3	

The results obtained are satisfactory as per standard requirements.

AE-02

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

B KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

ID : CP-2021-10-22-24 **Date: 31/07/2021**

ject Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

ncy : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83

tomer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

e of Receipt : 05-07-21

stomer ID : PCC for SSM Footing

nple Type /Size : 150X150X150 mm

nple grade/Age : M15 / 28 Days Compressive Strength

ference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

te of test : 31/07/2021

L. o.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm²)	Average Compressive Strength (N/mm²)
1	PCC	M15	03/07/2021	31/07/2021	151.50 X 150.01 X 151.85	22726	8.621	404.2	17.8	17.8
2	PCC	M15	03/07/2021	31/07/2021	149.26 X 149.84 X 151.23	22365	8.069	397.7	17.8	
3	PCC	M15	03/07/2021	31/07/2021	149.58 X 150.81 X 149.64	22559	8.161	403.8	17.9	

The results obtained are satisfactory as per standard requirements.

AE-02

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

ID : CP-2021-10-22-24

Date: 17/07/2021

ject Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

ncy : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83

tomer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

e of Receipt : 12-07-21

tomer ID : Footing Concrete

nple Type /Size : 150X150X150 mm

nple grade/Age : M20 / 7 Days Compressive Strength

ference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

te of test : 17/07/2021

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Footing Concrete	M20	10/07/2021	17/07/2021	150.31 X 151.48 X 151.33	22769	8.351	430.3	18.9	18.5
2	Footing Concrete	M20	10/07/2021	17/07/2021	149.45 X 151.70 X 151.35	22672	8.895	417.7	18.4	
3	Footing Concrete	M20	10/07/2021	17/07/2021	149.09 X 149.84 X 151.10	22339	8.546	404.4	18.1	

The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M.: 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 24/07/2021

ID	:	CP-2021-10-22-24
ject Name	:	Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08 **CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION**
ncy	:	Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83
tomer's Reference	:	BBMP/EE/Ynk-D/W.O/01/2020-21
e of Receipt	:	19-07-21
stomer ID	:	Plinth beam Concrete
mple Type /Size	:	150X150X150 mm
mple grade/Age	:	M25 / 7 Days Compressive Strength
ference to BIS codes	:	IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5
te of test		24/07/2021

L o.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Plinth beam Concrete	M25	17/07/2021	24/07/2021	151.84 X 151.83 X 151.00	23054	8.995	548.9	23.8	23.0
2	Plinth beam Concrete	M25	17/07/2021	24/07/2021	150.20 X 149.26 X 150.25	22419	8.117	513.7	22.9	
3	Plinth beam Concrete	M25	17/07/2021	24/07/2021	151.70 X 151.10 X 149.18	22922	8.560	508.6	22.2	

The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig ..... Date ..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

b ID : CP-2021-10-22-24

Date: 19/08/2021

oject Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

gency : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83

stomer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

te of Receipt : 24-07-21

stomer ID : Column Concrete Upto Plinth beam

mple Type /Size : 150X150X150 mm

mple grade/Age : M25 / 28 Days Compressive Strength

eference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

ate of test : 19/08/2021

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Column Concrete Upto Plinth beam	M25	22/07/2021	19/08/2021	149.18 X 150.51 X 151.98	22453	8.832	609.5	27.1	27.3
2	Column Concrete Upto Plinth beam	M25	22/07/2021	19/08/2021	150.86 X 149.30 X 150.07	22523	8.397	596.5	26.5	
3	Column Concrete Upto Plinth beam	M25	22/07/2021	19/08/2021	151.82 X 151.54 X 150.44	23006	8.006	652.3	28.4	

* The results obtained are satisfactory as per standard requirements.

AE-02

CIVIL PRO Sig. Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
| SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

Lab ID : CP-2021-10-22-24

Date: 04/09/2021

Project Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

Agency : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83

Customer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 09-08-21

Customer ID : GF Chejja Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 04/09/2021

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	GF Chejja Concrete	M20	07/08/2021	04/09/2021	151.24 X 150.51 X 151.38	22763	8.355	542.6	23.8	23.2
2	GF Chejja Concrete	M20	07/08/2021	04/09/2021	150.62 X 150.16 X 151.43	22618	8.632	509.7	22.5	
3	GF Chejja Concrete	M20	07/08/2021	04/09/2021	150.86 X 151.90 X 150.99	22915	8.980	532.5	23.2	

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

LABORATORY | STRUCTURAL | ENVIRONMENTAL
SURVEYING SERVICES

TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

Lab ID : CP-2021-10-22-24

Date: 15/09/2021

Project Name : Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08

CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION

Agency : Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83

Customer's Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 20-08-21

Customer ID : G.F Stair Case Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M25 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 15/09/2021

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	G.F Stair Case Concrete	M25	18/08/2021	15/09/2021	151.61 X 149.84 X 151.49	22717	8.832	629.2	27.7	27.6
2	G.F Stair Case Concrete	M25	18/08/2021	15/09/2021	151.27 X 151.61 X 150.69	22935	8.397	614.6	26.8	
3	G.F Stair Case Concrete	M25	18/08/2021	15/09/2021	150.06 X 151.75 X 150.72	22771	8.006	645.8	28.4	

*The results obtained are satisfactory as per standard requirements.

AE-02

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

Date: 20/09/2021

)	:	CP-2021-10-22-24
t Name	:	Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08 **CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION**
cy	:	Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83
omer's Reference	:	BBMP/EE/Ynk-D/W.O/01/2020-21
of Receipt	:	15-09-21
tomer ID	:	F F Lintel Concrete
ple Type /Size	:	150X150X150 mm
ple grade/Age	:	M20 / 7 Days Compressive Strength
erence to BIS codes	:	IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5
te of test		20/09/2021

A.E.E

L o.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	F F Lintel Concrete	M20	13/09/2021	20/09/2021	150.39 X 149.45 X 149.70	22476	8.054	410.4	18.3	18.4
2	F F Lintel Concrete	M20	13/09/2021	20/09/2021	150.45 X 151.43 X 149.85	22783	8.997	414.6	18.2	
3	F F Lintel Concrete	M20	13/09/2021	20/09/2021	150.05 X 150.04 X 150.30	22514	8.897	424.0	18.8	

The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig ..... Date ..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

D	:	CP-2021-10-22-24
	:	
t Name		Improvements to roads drains and other developmental works in Ananthapura Attur Ward No 03 under SWM head in Chief Minister Nava Nagarothan grants of yelahanka division Package -08
		CONSTRUCTION OF SAMUDAYA BHAVANA IN CHOWDESHWARI WARD NO -02 OF YELAHANKA SUB DIVISION
y	:	Sri A Channareddy,M/s ACR Projects, Engineers & Contractors, No.01,Byrappa Circles, Jambusavaridinne, J.P. Nagara,8th phase ,Bangalore-83
omer's Reference	:	BBMP/EE/Ynk-D/W.O/01/2020-21
of Receipt	:	27-09-21
mer ID	:	F.F Staircase Concrete
ple Type /Size	:	150X150X150 mm
ple grade/Age	:	M25 / 7 Days Compressive Strength
rence to BIS codes	:	IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5
e of test	:	02/10/2021

Date: 02/10/2021

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm²)	Average Compressive Strength (N/mm²)
1	F.F Staircase Concrete	M25	25/09/2021	02/10/2021	151.51 X 151.25 X 149.99	22916	8.995	544.8	23.8	22.9
2	F.F Staircase Concrete	M25	25/09/2021	02/10/2021	149.18 X 151.79 X 151.16	22644	8.117	509.8	22.5	
3	F.F Staircase Concrete	M25	25/09/2021	02/10/2021	150.96 X 151.46 X 151.41	22864	8.560	510.8	22.3	

The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig ..... Date ..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
MANAGEMENT | SURVEYING SERVICES

TEST REPORT FOR SAND MASONRY MORTARS

Lab ID : **CP-2021-10-22-24**

Date: 23-08-21

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	3.18	-
2	Specific Gravity	2.51	-
3	Material finer than 75 micron(%)	12.2	Crushed Fine aggregate Max 15%
4	Compacted Bulk Density (Kg/litre)	1.90	-
5	Loose Bulk Density (Kg/litre)	1.73	-

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

"Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Second and Final Bill

Quality Control Reports

BOOK NO - 02

QC ABSTRACT

NAME OF WORK: "Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

SL NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	GSB	SIEVE ANALYSIS	One Test		1	1
2	WMM	Sieve Analysis	One Test		1	1
		Impact Value	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
3	DBM	SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral Aggregate	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
4		SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
5	BITUMEN	Ductility	One Test		1	1
		Softening Point	One Test		1	1
		Penetration	One Test		1	1
		Flash Point	One Test		1	1
		Fire Point	One Test		1	1
6	TACK COAT	Rate of spread	One Test		1	1

TEST RESULTS OF GRADATION FOR WMM

Lab ID : CP-RW-2021-09-16-23 Date: 24-06-21

Project Name : "Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Improvements to roads and drains at Ananthapura village limits

Agency : Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No 01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.

Customer Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 22-06-21

Type of Mix : WMM (Wet Mix Macadam)

Date of Test : 22-06-21

Oven Dry Weight : 11000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0.0	100.0	100
45	315	315	2.9	97.1	95-100
22.4	2259	2574	23.4	76.6	60-80
11.2	2179	4753	43.2	56.8	40-60
4.75	2251	7004	63.7	36.3	25-40
2.36	1621	8625	78.4	21.6	15-30
0.6	623	9248	84.1	15.9	8-22
0.075	1338	10586	96.2	3.8	0-5

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig Date BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

TEST REPORT OF AGGEGRATE IMPACT VALUE
IS: 2386 Part IV

Lab ID : **CP-RW-2021-09-16-23** **Date: 24-06-21**

Project Name : "Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Improvements to roads and drains at Ananthapura village limits

Agency : Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83

Customer Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 22-06-21

Type of Mix : Coarse Aggregate for WMM (Wet Mix Macadam)

Date of Test : 22-06-21

Sl.No	Particulars of observations	Index	TEST 1	TEST 2
1	Total weight of the surface dry sample sample (passing 12.5 mm and retained on 10mm sieve)	A	300.2	300.2
2	Weight of fraction passing 2.36mm sieve After giving 15 blows	B	73.9	74.0
3	weight of fraction retained 2.36mm sieve After giving 15 blows	C	225.9	225.8
4	Total weight of (B+C) is less than the initial weight (Weight A) by more than one gram the result shall be discarded and a fresh test made.	A-(B+C)	0.4	0.4
5	Aggregate impact value	(B/A)*100	24.6	24.7
6	Aggregate impact value (Mean of two tests)	Pecentage	24.6	

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪವಿಭಾಗ ಉಪವಿಭಾಗ,
ಜಿ.ಪಂ.ಬಿ. ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.
Sig.....
Date.....
CIVIL Pro BANGALORE
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

TEST RESULTS OF GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

) ID	:	CP-RW-2021-09-16-23 **Date: 23-07-21**
)ject Name	:	"Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08" **Improvements to roads and drains at Ananthapura village limits**
gency	:	Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.
ustomer Reference	:	BBMP/EE/Ynk-D/W.O/01/2020-21
)ate of Receipt	:	21-07-21
Type of Mix	:	DBM-Plant (Dense Bituminous Macadam)
Date of Test	:	21-07-21
Weight of Sample	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10 (grading -2)
37.5	0	0	0	100	100
26.5	250	250	5.00	95.00	90-100
19	350	600	12.00	88.00	71-95
13.2	450	1050	21.00	79.00	56-80
4.75	1750	2800	56.00	44.00	38-54
2.36	400	3200	64.00	36.00	28-42
0.3	1350	4550	91.00	9.00	7-21
0.075	250	4800	96.00	4.00	2-8
PAN	200	5000	0.00	0	0

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪವಿಭಾಗ ಬಿಬಿಎಂಪಿ,
ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

Page 1/1
End of Report

TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2021-09-16-23** **Date: 31-07-21**
Project Name	:	"Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"
		Improvements to roads and drains at Ananthapura village limits
Agency	:	Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.
Customer Reference	:	BBMP/EE/Ynk-D/W.O/01/2020-21
Date of Receipt	:	28-07-21
Type of Mix	:	BC(Bitumenous Concrete)
Date of Test	:	28-07-21

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.5	1.5	98.3	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಆಯುಕ್ತರ ಆಯುಕ್ತರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-೦೯

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
****End of Report****

TESTS RESULTS ON STABILITY OF MIX

Lab ID : **CP-RW-2021-09-16-23** **Date: 31-07-21**

Project Name : "Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Improvements to roads and drains at Ananthapura village limits

Agency : Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.

Customer Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 28-07-21

Type of Mix : BC (Bituminous Concrete)

Date of Test : 28-07-21

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.14	11.13	10KN(min)
2	Marshal flow at 60°C, mm	3.52	3.51	2-4
3	Percent air Voids	4.82	4.83	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.28	14.26	13-15
5	Percent Voids filled with Bitumen(VFB %)	71.87	71.63	65-75
6	Density, g/cc	2.25	2.26	–

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಬ.ಮ.ಪ. ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

K KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2021-09-16-23** **Date: 03-07-21**
Project Name	:	"Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08" **Improvements to roads and drains at Ananthapura Mahalakshmi layout Limits**
Agency	:	Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.
Customer Reference	:	BBMP/EE/Ynk-D/W.O/01/2020-21
Date of Receipt	:	01-07-21
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	:	01-07-21

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	12.8%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	12.5%	
Combined Flakiness and Elongation Index for WMM	25.3%	

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

TESTS RESULTS ON STABILITY OF MIX

Lab ID : **CP-RW-2021-09-16-23**

Project Name : **Date: 29-07-21**

"Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Improvements to roads and drains at Ananthapura Mahalakshmi layout Limits

Agency : Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.

Customer Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 26-07-21

Type of Mix : DBM (Dense Bituminous Mecadam)

Date of Test : 26-07-21

The results of the tests conducted on the Dense Bituminous Macadam mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.29	11.82	9KN(Min)
2	Marshal flow at 60°C, mm	3.54	3.87	2-4
3	Percent air Voids	4.56	4.17	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.54	14.76	13-15
5	Percent Voids filled with Bitumen(VFB %)	68.98	70.28	65-75
6	Density, g/cc	2.42	2.40	–

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig ..... Date ..... BANGALORE

Page 1/1
End of Report

TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID : CP-RW-2021-09-16-23 **Date: 05-08-21**

Project Name : "Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Improvements to roads and drains at Ananthapura Mahalakshmi layout Limits

Agency : Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.

Customer Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 02-08-21

Type of Mix : BC(Bitumenous Concrete)

Date of Test : 02-08-21

Type of Binder : 60/70

% of Binder Used : 5.0%

Weight of Aggregate : 200.0 gm

Weight of Binder : 10.0 gm

Temperature of water bath : 40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.5	1.5	98.3	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

Page 1/1
****End of Report****

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

TESTS RESULTS ON STABILITY OF MIX

Lab ID : **CP-RW-2021-09-16-23** **Date: 05-08-21**

Project Name : "Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Improvements to roads and drains at Ananthapura Mahalakshmi layout Limits

Agency : Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J.P. Nagara, 8th Phase, Bangalore-83.

Customer Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 02-08-21

Type of Mix : BC (Bituminous Concrete)

Date of Test : 02-08-21

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

SLNo	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.14	11.13	10KN(min)
2	Marshal flow at 60°C, mm	3.52	3.51	2-4
3	Percent air Voids	4.82	4.83	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.28	14.26	13-15
5	Percent Voids filled with Bitumen(VFB %)	71.87	71.63	65-75
6	Density, g/cc	2.25	2.26	–

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಆಯುಕ್ತರು ಆಯಂತರದ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಬ.ಎಂ.ಪ. ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

CIVIL Pro BANGALORE
Sig
Date

R.KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL| ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Lab ID : CP-RW-2021-09-16-23

Date: 12-08-21

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 472

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	6	6	1.3	98.7	90-100
9.5	60	66	14.0	86.0	70-88
4.75	110	176	37.3	62.7	53-71
2.36	88	264	55.9	44.1	42-58
1.18	30	294	62.3	37.7	34-48
0.6	11	305	64.6	35.4	26-38
0.3	46	351	74.4	25.6	18-28
0.15	45	396	83.9	16.1	12-20
0.075	55	451	95.6	4.4	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 470

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	4	4	0.9	99.1	90-100
9.5	62	66	14.0	86.0	70-88
4.75	112	178	37.9	62.1	53-71
2.36	88	266	56.6	43.4	42-58
1.18	29	295	62.8	37.2	34-48
0.6	11	306	65.1	34.9	26-38
0.3	46	352	74.9	25.1	18-28
0.15	45	397	84.5	15.5	12-20
0.075	50	447	95.1	4.9	4-10

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಆಯುಕ್ತರಾಲಕ ಅಧಿಕಾರಿಗಳು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-10

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

ab ID : CP-RW-2021-09-16-23

Date: 27-08-21

AFTER EXTRACTION - Trail-1

otal Weight of the Sample(gm) : 472

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	7	7	1.5	98.5	90-100
9.5	63	70	14.8	85.2	70-88
4.75	112	182	38.6	61.4	53-71
2.36	80	262	55.5	44.5	42-58
1.18	29	291	61.7	38.3	34-48
0.6	11	302	64.0	36.0	26-38
0.3	46	348	73.7	26.3	18-28
0.15	45	393	83.3	16.7	12-20
0.075	51	444	94.1	5.9	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 471

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	5	5	1.1	98.9	90-100
9.5	65	70	14.9	85.1	70-88
4.75	112	182	38.6	61.4	53-71
2.36	85	267	56.7	43.3	42-58
1.18	29	296	62.8	37.2	34-48
0.6	11	307	65.2	34.8	26-38
0.3	46	353	74.9	25.1	18-28
0.15	45	398	84.5	15.5	12-20
0.075	52	450	95.5	4.5	4-10

* The results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಆಯುಕ್ತರು ಕಾಲ ಆಯುಕ್ತರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

CIVIL Pro BANGALORE
Sig.
Date

KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 2/2
End of Report

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

DETERMINATION OF RATE OF SPREAD TACK COAT

Lab ID : CP-RW-2021-09-16-23 Date: 12-08-21

Project Name : "Improvements to Roads Drains and Other Developmental Works in Ananthapura Attur Ward No 03 Under SWM Head in Chief Minister Nava Nagarothan Grants of Yelahanka Division Package 08"

Improvements to roads and drains at Ananthapura Mahalakshmi layout Limits

Agency : Sri A Channareddy, M/s ACR Projects, Engineers & Contractors, No.01, Byarappa Circle, Jambusavaridinne, J P. Nagara, 8th Phase, Bangalore-83.

Customer Reference : BBMP/EE/Ynk-D/W.O/01/2020-21

Date of Receipt : 11-08-21

Type of Mix : Tack coat

Date of Test : 11-08-21

Sl.No	Determination	Unit	TEST 1	TEST 2
1	Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
2	Area of Plate (a)	Sq.mtr	0.09	0.09
3	Initial Wt of empty Plate (b)	Kg	0.78	0.748
4	Final weight of plate after application of tack Coat (c)	Kg	0.803	0.771
5	Weight of tack Coat (d=c-b)	Kg	0.023	0.023
6	Rate of spread of tack coat	Kg/sq m	0.256	0.256
7	Average	Kg/sq m	0.256	
8	Specified Limit	Kg/sq m	0.250 Kg/sq m	

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro BANGALORE Sig..... Date.....

ADITHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಜಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106